

JC Raulston Arboretum Plant Focus

In Search of Lilacs for the South

Helping
Carolinians
Increase Their
Knowledge of
Gardening,
Manage Their
Landscape
Investment &
Protect the
Environment

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Spot

Many of us remember those fragrant lilacs that grew in the gardens of our parents or grandparents. But we may not remember all the problems that afflicted those plants. The plant that most of us identify as a lilac is the common lilac, *Syringa vulgaris*. Some varieties of common lilac will do pretty well in the North Carolina mountains. Unfortunately, these lilacs do not like the heat they encounter in the warmer parts of our state and often become afflicted with powdery mildew and borers.

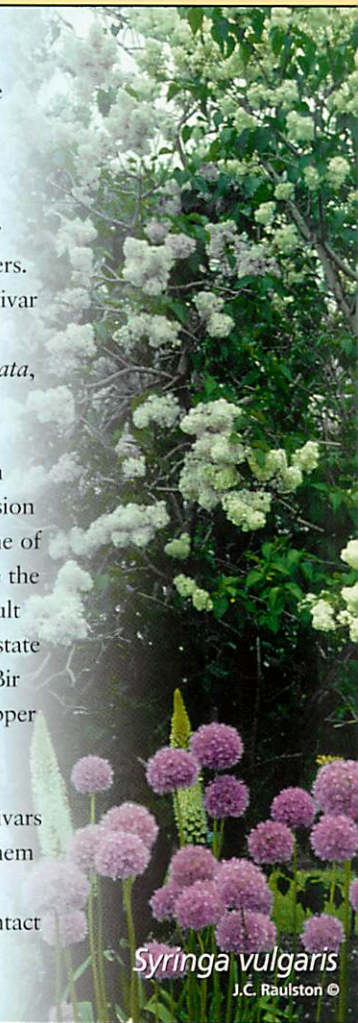
That fact has led horticulturists to look at other species. 'Miss Kim', a cultivar of *Syringa patula*, has been publicized as a lilac that can take hot Southern conditions. Another lilac mentioned as a candidate is *Syringa oblata* var. *dilatata*, a variety of the Korean early lilac.

Dick Bir, a retired researcher and N.C. Cooperative Extension specialist, wanted to find lilacs that "look and smell like lilacs." He conducted trials on lilacs for 20 years at the Mountain Horticultural Crops Research and Extension Center in Fletcher. These long-term observations led Bir to conclude that one of the best groups of lilacs for the piedmont and coastal plain of our state were the cultivars in the *Syringa x hyacinthiflora* group. This hybrid species is the result of crossing *Syringa oblata* and *Syringa vulgaris*. Many garden centers in the state will have some of these cultivars available this spring. As for *Syringa oblata*, Bir said it flowers too early to consistently avoid frost and freeze damage in the upper piedmont and mountains. For warmer areas, *Syringa oblata* selections and hybrids deserve a try.

In spite of Raleigh's hot summers and mild winters, lilac species and cultivars can be observed at the JC Raulston Arboretum (JCRA). Look for many of them in the eastern sections of the JCRA.

For more information on the types of lilacs that do best in your area, contact your county Cooperative Extension agent.

Kevin D. Starr



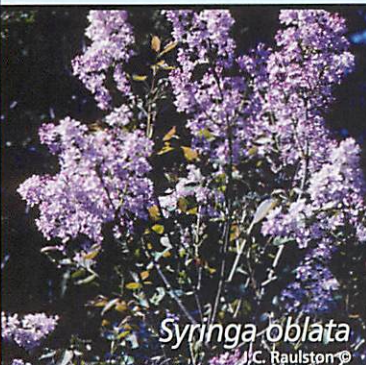
Syringa vulgaris
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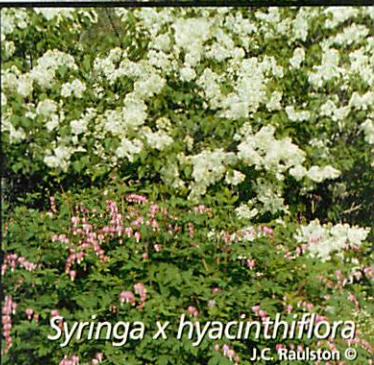
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Syringa oblata
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Syringa oblata
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Syringa x hyacinthiflora
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Set in Stone

Stones denote permanence and reliability. In the landscape they provide a natural beauty and a functional solution to landscape problems. Stone or concrete pavers that resemble stone are quite beautiful for walkways, patios, curbs and low retaining walls.

When using stone, avoid the mistake many novice gardeners make in inadequately preparing the site. Just as in planting a garden, preparing the site will yield better results. Dig down into the subgrade about 12 inches to develop a stable base. Cover the area with a geotextile fabric and then add a base. On clay soils an 8-inch layer of crusher run gravel will make a suitable base. Add in 2-inch layers and compact between layers. In well-drained sandy soils you can get by with 4 to 6 inches of this material.

On top of the base, add an inch layer of sand to form a setting bed for the pavers. Use a 1-inch diameter iron pipe as a screed rail to level and smooth the sand. Smooth the sand but do not compact the sand before setting the paver. An edge restraint of some type is necessary. If the edge restraint is not enough to keep the sand under the pavers, use additional geotextile fabric. For best results, establish a 90-degree angle as a starting point. Mark the sand with a chalk line. Otherwise, use lines suspended over the bed to lay the pavers in a straight line. Joint sand has a structural function, so don't subject the pavers to any traffic before adding the joint sand.

In addition to using stones or pavers for walkways and other hardscaping uses, they can be striking when used in other ways. Large stones in the landscape help create a less formal focal point. The most

common mistakes with large stones are allowing them to sit too high and using the same size. Position the stones so that their base is four to six inches into the ground, and mix up the sizes to make the composition more interesting. Choose the stone that works best for your landscape, whether it's flagstone, weathered sandstone, decorative gravel, boulders or one of the many other options available.

If used properly, stone adds to the aesthetics of the landscape. Gardeners can soften the hardness of stone and pull it into the overall design with delicate, colorful or fine-textured plants.

David Goforth



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Control Brown Patch

Brown patch, a common disease of both warm- and cool-season grasses, often can be controlled by avoiding excessive amounts of nitrogen during conditions that are favorable to the development of the disease.

Cool-season lawns should receive limited applications of nitrogen in the late spring and little or no nitrogen during the summer. The majority of fertilizers should be applied in the fall at the time when most root development is occurring. Never apply more than one pound of nitrogen per 1,000 square feet at any one time. Avoid watering late in the day as this promotes disease development. Make sure mower blades are sharp to avoid wounding turf. Never mow a wet lawn and always mow high. Fungicide applications are only mar-

ginally helpful when applied to home lawns.

Warm-season lawns are susceptible to brown patch during periods of cool, wet weather in the spring and fall. Much the same as cool-season grasses, late day watering, dull mower blades, lack of sufficient drainage and lack of air movement can increase the likelihood of brown patch occurrence. Avoid high nitrogen fertilizer when conditions are suitable for the development of brown patch. Adequate levels of phosphorous and potassium are necessary in both cool- and warm-season turfgrasses. Use a soil test to determine levels needed. There are no fungicides labeled for the effective control of brown patch in warm-season grasses.

Donna Teasley



Why aren't my azaleas blooming?

Are you in the habit of pruning or shearing your ornamental plants each fall? If so, there is your answer. Azaleas and many other spring bloomers should be pruned as soon as possible after blooms fade in the spring. Next year's flower buds will be formed later this summer. If you wait until fall or summer to prune, most of next year's blooms will be lost. Keep a firm deadline of July 1 to prune your azaleas – earlier is better, but no later!

While temperature extremes can kill entire plants, low temperatures or sudden drops in temperature may kill flower buds without damage to the stems. There is a great deal of variation in cold tolerance among azalea cultivars, ranging from 10

degrees to as low as -40 degrees F. Unusual cold snaps for your region could cause a loss of blooms. Protect plants with covers only if practical and if you can remove them before temperatures reach normal levels.

Young azaleas may take two or three seasons to become established in a new location. If the plant has been there less than three years, give it another season provided it is in the proper location and properly planted. Azaleas prefer partial shade, medium to good drainage, medium fertility with high organic content, and adequate (not excessive) moisture. Excessive nitrogen and low phosphorus levels prevent blooming in many plants. Soil pH should be between 5.0 and 5.5. Soil testing is the only reliable way to evaluate pH and fertility. *Mike Wilder*

ENVIRO-TIP

Alternatives to Chemical Pesticides

North Carolinians are concerned about their environment and food safety, prompting many to look for alternatives to synthetic pesticides to control insects and disease in their gardens and landscapes. The best prescription is prevention by using good cultural practices.

A healthy, vigorous plant will fare much better against pests and disease than a poor, sick plant. Help ensure the health of your plants by adopting the following practices.

Test your soil and increase the amount of organic matter by using compost to give your plants a healthy start.

Choose the right plant for the right place. Look for drought tolerant and disease resistant plants. Be sure to place plants in the right area for sun or shade preference.

Plant and harvest vegetables at the right time. This will help prevent many garden vegetables from being damaged by insects. Sweet corn planted early may avoid the ravages of the corn earworm and fall armyworm, especially if harvested prior to

July 15 in the coastal plain. Early squash may reach maturity before the pickleworm arrives.

Diversify your planting. In the vegetable garden plant flowers and herbs between your crops. In the landscape avoid planting long rows of the same tree or shrub. A diverse plant population will prevent overpopulation of insect species.

Proper watering techniques will decrease your chance of disease. Drip or trickle irrigation gets water to the root zone without getting water on the leaves and flowers. A layer of mulch controls weeds and conserves soil moisture while increasing soil organic matter.

If a pest does become a problem, consult your county Cooperative Extension agent for recommendations on control methods. Proper identification of the pest – weed, insect or disease – is critical for quality control. Remember, a certain level of pest population must be tolerated for environmental sustainability.

Amy-Lynn Albertson



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► **April 8-10**

- Opening times vary each day
- Southern Ideal Home Show, Raleigh
- Extension's Successful Gardener Learning Center, open throughout show
- Details: (919) 245-2050

► **April 30, 9:30 to 11:30 a.m.**

- Bryce Lane of "In the Garden with Bryce Lane" on UNC-TV
- Agricultural Center, Fayetteville
- Details: (910) 321-6870
- Cost: \$10

gardentalk



"When one tugs at a single thing in nature, he finds it attached to the rest of the world."

John Muir



Extension's *Successful Gardener*SM program provides timely, research-based horticultural information. The newsletter is part of the statewide horticulture program which includes Extension's *Successful Gardener*SM Regional Seminar Series and county workshops. We publish 10 issues per year. Comments concerning *Successful Gardener*SM may be sent to:

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Gardening in April

Lawns

- Warm-season grasses like Bermuda and centipede can be planted this month. These grasses thrive with warm conditions and are ideal for the eastern part of the state.
- Mow tall fescue lawns to three inches in height. Mow often enough that you are not taking off more than one-third of the leaf blade. Leave grass clippings on the lawn. As they decompose they return nutrients to the lawn.
- A second application of preemergent crabgrass preventer can be made to tall fescue lawns if severe infestation has occurred in the past.
- Begin spot treatment of summer annual broadleaf weeds.

Ornamentals

- Prune spring-flowering shrubs like forsythia and weigela after they bloom.
- If your soil test report recommends fertilizer for your shrubs and trees, now is the time to apply. Nitrogen fertilizer will have its greatest effect three to four weeks after application.
 - Many ornamental insect pests become active this month. Apply pesticides only when necessary and treat problem early.
 - Some cool-season annuals like petunias and snapdragons can be planted this month. Other annuals like impatiens and vinca will perform better if planted in early May when the soil is warmer and the chance of frost is past.

Edibles

- If your garden was not limed last year, apply 50 pounds of lime per 1,000 square feet and till in before planting.
- Finish planting cool-season vegetables like cabbage and broccoli by the first week of April.
- Contact your county Cooperative Extension Center for other vegetable planting dates.

Mark Danieleley

One of Extension's *Successful Gardener* team

members, **Toby Bost**, horticulture agent in Forsyth County, has a new book out that's sure to be a hit with Carolina gardeners. Bost teamed up with Jim Wilson of South Carolina (and *The Victory Garden* fame) to write *The Carolinas Gardener's Guide*.

The book is divided into chapters on annuals, perennials, bulbs, grasses, roses, shrubs, trees and more, with each page dedicated to one plant for Carolina gardens. Symbols for each plant provide quick reference for sunlight and water requirements and other information. A large color photo beautifully illustrates each plant, and the authors include common names, bloom periods, seasonal colors, mature height and spread, as well as instructions for planting, care and growing tips.

The authors also suggest companion plants, design ideas and their personal favorite cultivars for every plant. Both novice and experienced gardeners alike will find the book beneficial. Ask for *The Carolinas Gardener's Guide* at your local bookstore.

TOP AWARDS RECEIVED FROM:

- ▶ North Carolina State Grange/Extension Foundation
- ▶ Garden Writers Association
- ▶ International Association of Business Communicators
- ▶ N.C. & National Associations of County Agricultural Agents
- ▶ Southern Extension Forest Resource Specialists
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